

## DETAILED ACTION

### ***Claim Objections***

1. Claims 4 and 5 are objected to as duplicates of claims 8 and 9.
2. Claim 6 is objected to as depending from a claim which is objected to.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosch et al. (US 6,241,472) in view of Rains et al. (US 4,209,259). Regarding claims 1 and 7, Bosch ('472) discloses a device comprising an inner stationary ring (the inner most ring of 40) and a concentric outer ring (one of the rings of 38), the rings arranged with a close fit and having a plurality of through recesses opposing each other (see Fig. 3). It is not explicitly disclosed that the device is driven without a shaft. Rains explains that it is beneficial to drive a rotor in a vessel magnetically, using a drive unit outside the vessel without a shaft, because no seals are required (see col. 5 line 66 to col. 6 line 5). It would have been obvious to one of ordinary skill in the art to have driven the rotor of Bosch in this manner to achieve the benefit of eliminating the need for seals. In the embodiment of Fig. 3, the outermost ring of the stator is more outward than that of the rotor. However, teachings of alternatives such as Fig. 20 versus Fig. 21

would convey to one of ordinary skill in the art that either the rotor or the stator could have the outermost portion. Regarding claims 2 and 3, the shearing recesses are otherwise shaped holes (see Fig. 3).

***Allowable Subject Matter***

5. Claims 8 and 9 are allowed.
6. Claims 4-6 are directed to allowable subject matter, but are objected to for the reasons explained above.

***Response to Arguments***

7. Applicant indicates applicant 4/19/2010 communication is "after final"; however, the application was not under final rejection. The amendment has been entered.
8. While applicant's arguments concerning claims 4-6, 8 and 9 have been found persuasive, claims 1-3 and 7 remain rejected. That Bosch shows pairs of alternatives such as Fig. 20 versus Fig. 21 and Fig. 22 versus Fig. 23, where the main difference is whether the rotor or stator is the outermost ring, would have rendered obvious a corresponding alternative with respect to the embodiment of Fig. 3.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID L. SORKIN whose telephone number is (571)272-1148. The examiner can normally be reached on Mon.-Fri. 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID L. SORKIN/  
Primary Examiner, Art Unit 1797